

## METHOD FOR GENERATING A NETWORK MAP

### ABSTRACT OF THE DISCLOSURE

An intelligent traffic redirection system performs global load balancing for Web sites located at mirrored data centers. The system relies on a network map that is generated continuously, preferably for the user-base of the entire Internet. Instead of probing each local name server (or other host) that is connectable to the mirrored data centers, the network map identifies connectivity with respect to a much smaller set of proxy points, called "core" (or "common") points. A core point is representative of a set of local name servers (or other hosts) that, from a data center's perspective, share the point. To discover a core point, an incremental trace route is executed from each of the set of mirrored data centers to a local name server that may be used by client to resolve a request for a replica stored at the data centers. An intersection of the trace routes at a common routing point is then identified. Thus, for example, the common routing point may be the first common point for the trace routes when viewed from the perspective of the data centers (or the last common point for the trace routes when viewed from the perspective of the local name server). The common routing point is then identified as the core point for the local name server.